Florida Department of
TRANSPORTATION

Complete Streets

Florida Department of Transportation

presented to

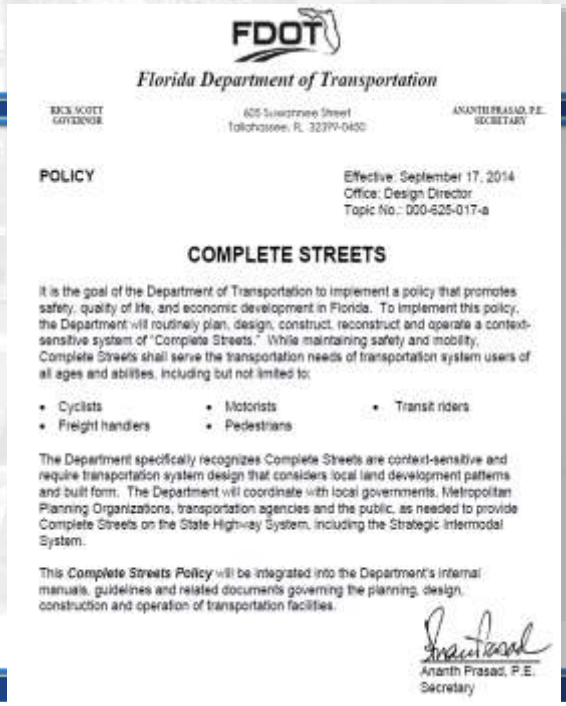
Design Expo 2015

presented by

DeWayne Carver, AICP
State Bicycle/Pedestrian Coordinator
FDOT Roadway Design Office

DRIVING DOWN FATALITIES

Complete Streets



Florida Department of Transportation

RICK SCOTT
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

ANANTH PRASAD, P.E.
SECRETARY

POLICY

Effective: September 17, 2014
Office: Design Director
Topic No.: 000-625-017-a

COMPLETE STREETS

It is the goal of the Department of Transportation to implement a policy that promotes safety, quality of life, and economic development in Florida. To implement this policy, the Department will routinely plan, design, construct, reconstruct and operate a context-sensitive system of "Complete Streets." While maintaining safety and mobility, Complete Streets shall serve the transportation needs of transportation system users of all ages and abilities, including but not limited to:

- Cyclists
- Freight handlers
- Motorists
- Pedestrians
- Transit riders

The Department specifically recognizes Complete Streets are context-sensitive and require transportation system design that considers local land development patterns and built form. The Department will coordinate with local governments, Metropolitan Planning Organizations, transportation agencies and the public, as needed to provide Complete Streets on the State Highway System, including the Strategic Intermodal System.

This **Complete Streets Policy** will be integrated into the Department's internal manuals, guidelines and related documents governing the planning, design, construction and operation of transportation facilities.

Ananth Prasad, P.E.
Secretary

Complete Streets

- Policy adopted in Sept 2014
- Requires “context-appropriate complete streets”
- Promotes economic development
- Addresses our safety problem with pedestrians and cyclists
- Lets FDOT “right size” our streets to fit their contexts
- Promotes more cost-effective solutions to transportation issues

Local Government Interest….

- **Local governments are adopting “complete streets”**
- **We work there too**
- **Lead, follow, or get out of the way**

Complete Streets

- **Multidisciplinary Team**
- **Revision of manuals and guidance to incorporate context based design**
- **Implementation, Guidance & Training in approximately a year**

Implementation Plan

- ✓ **Kick off February 16, 2015**
- ✓ **First Workshop - March 10**
  - Transportation and Land Use
- ✓ **Second Workshop - April 7 & 8**
  - Active Transportation
  - Public Transportation
- ✓ **Third Workshop May 13 & 14**
  - Intelligent Transportation Systems (ITS)
  - Transportation Demand Management (TDM)
  - Freight Logistics
- ✓ **Fourth Workshop June 3 & 4**
  - Modal Integrations and Tradeoffs
- » **Develop CS Work Plan**
  - Draft Document mid-August
  - Workshop 5 to review draft
  - Final Document mid-September
- » **Implementation**
  - Manual Revisions Completed - TBD
  - Training through 2016

Implementation Team - Districts

- **District 1**
  - Billy Hattaway
  - LK Nandam
  - Ed Ponce
  - Chris Zeigler
- **District 2**
  - Doreen Joyner-Howard
  - Jerry Ausher
- **District 3**
  - William Barber
  - Jared Perdue
- **District 4**
  - Richard Creed
  - Jennifer Fierman
- **District 5**
  - **Susanne Hertz**
  - **Michael Sanders**
- **District 6**
  - **Zak Lata**
  - **Daniel Iglesias**
- **District 7**
  - **Benson Stephen**
  - **Ron Chin**
- **Turnpike**
  - **Erin Yao**

Implementation Team - CO

- **Catherine Bradley** — **PD&E**
- **Rusty Ennemoser** — **PD&E**
- **Jeff Caster** — **Landscape Architects**
- **Fred Heery** — **Traffic Operations**
- **Angela Wilhelm** — **Traffic Operations**
- **Kurt Lieblong** — **RDO Practical Design**
- **Diane Quigley** — **Transit**
- **Dean Perkins** — **ADA**
- **Melanie Weaver Carr** — **Policy Planning**
- **Maria Cahill** — **Policy Planning**
- **Gary Sokolow** — **Access Mgt/Systems Planning**
- **Joseph Santos** — **State Safety Office**
- **Rickey Fitzgerald** — **State Freight Coordinator**
- **Keith Robbins** — **Alternate for Rickey Fitzgerald**
- **Paul Hiers** — **Roadway Design**
- **MaryAnne Koos** — **Special Projects Coordinator/RDO**
- **DeWayne Carver** — **State Bicycle/Pedestrian Coordinator**
- **Jeremy Fletcher** — **RDO QA**
- **Michael Shepard** — **SRDE**

Implementation Team – Industry/Local Government

Victor Dover	Urban Design	CNU
Jim Harriott	Alachua County	Alachua County
Kim Delaney	Urban Design/Planning	TCRPC
Michael Dorweiler	Hillsborough Co Public Works	FL ITE
Robert Agrusa	Operations	FL ITE
Phillip Bello	FHWA	FHWA
Alexandrea Davis-Shaw	City Engineer	City of Sarasota
Tara McCue	Regional Planning	ECFRPC
Margaret Kubilins	FHWA Pedestrian Safety	VHB

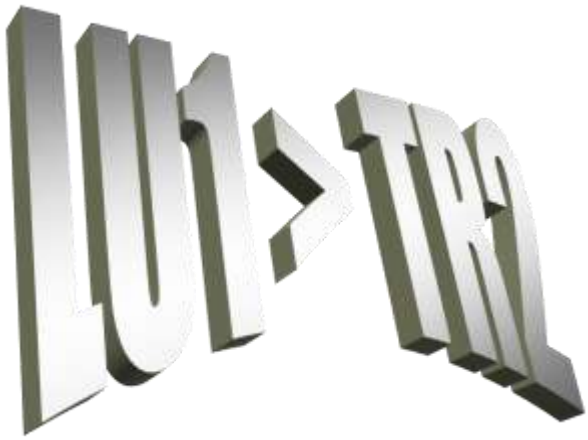
Why Active Transportation?

- **"Sitting is the new smoking"**
- **Economic Development**
- **Current FTP Goals**
- **New FDOT Complete Streets Policy**
- **State Safety Office**
- **Pedestrian/Bicycle Safety Coalition**
- **Pedestrian/Bicycle Policy Council**
- **Interagency Interest**
  - » DOH
  - » Law Enforcement
  - » DHSMV
  - » Local Governments

SR 50 in Sumter County


STOP


& DIAMONDS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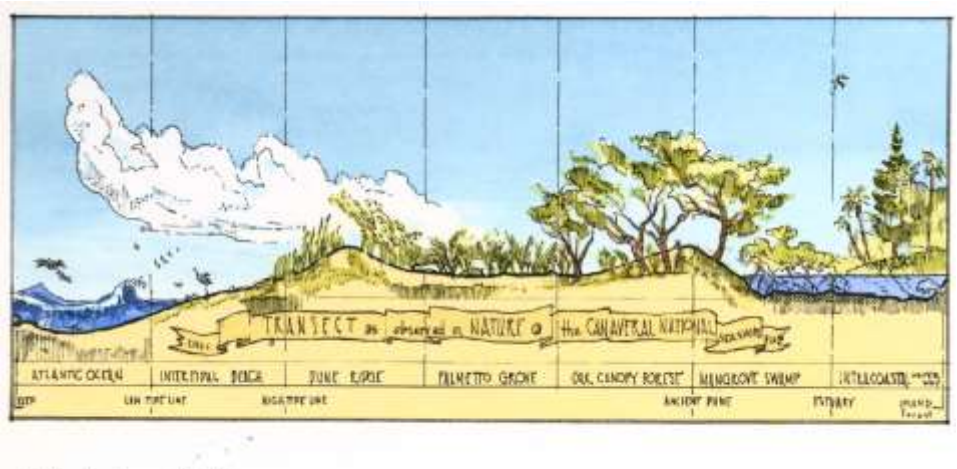

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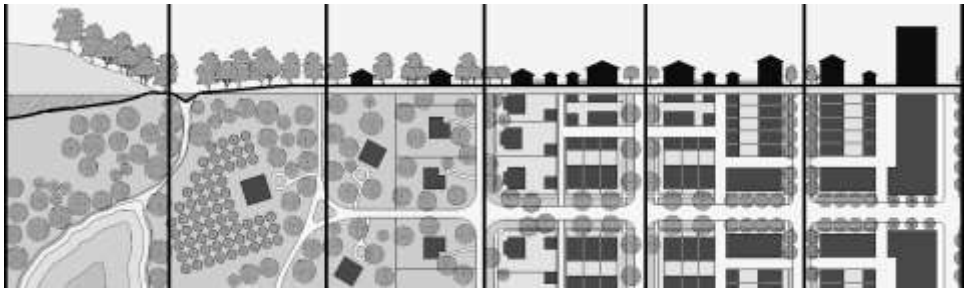
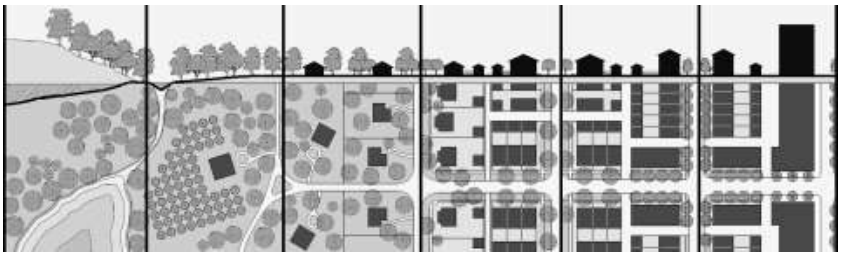
Source: James Wassell



ZHA, Inc.



T 1 T 2 T 3 T 4 T 5 T 6

Least Walkable (least urban)

Most Walkable (most urban)

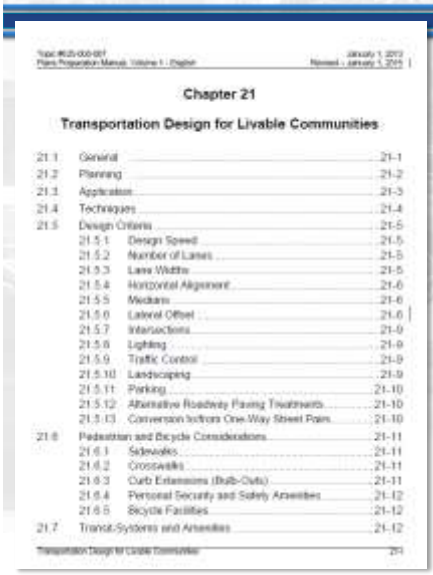

Quincy
Jacksonville I-94


HOLLYWOOD BLVD

Context-based design is not new….

- PPM Chapter 21-Transportation Design for Livable Communities
- ITE/CNU Recommended Practice: Designing Walkable Urban Thoroughfares
- FWHA Road Diet Guide and Functional Classification Guide
- NACTO Guides
- Florida Greenbook – Chapter 19
- FDOT TND Handbook

On State roads….



Chapter 21

Transportation Design for Livable Communities

A1A in Stuart, FL

Table 6.4 Design Parameters for Walkable Urban Thoroughfares (continued)

Thoroughfare Design Parameters for Walkable Mixed-Use Areas									
	General Urban (C-4)			Urban Center/Core (C-5/6)					
	Commercial			Residential			Commercial		
	Boulevard [1]	Avenue	Street	Boulevard [1]	Avenue	Street	Boulevard [1]	Avenue	Street
Context									
Building Orientation (entrance orientation)	front	front	front	front	front	front	front	front	front
Maximum Setback [2]	20 ft.	20 ft.	20 ft.	10 ft.	10 ft.	10 ft.	0 ft.	0 ft.	0 ft.
Off-Street Parking Access/Location	rear, side	rear, side	rear, side	rear	rear	rear, side	rear	rear	rear, side
Streetside									
Recommended Streetside Width [3]	16 ft.	16 ft.	16 ft.	22 ft.	16 ft.	16 ft.	22 ft.	16 ft.	16 ft.
Minimum Sidewalk (Throughway) width	8 ft.	6 ft.	6 ft.	10 ft.	8 ft.	6 ft.	10 ft.	8 ft.	6 ft.
Pedestrian Buffers (planting strip exclusive of travel way width) [3]	7 ft. (tree well)	6 ft. (tree well)	6 ft. (tree well)	7 ft. (tree well)	6 ft. (tree well)	6 ft. (tree well)	7 ft. (tree well)	6 ft. (tree well)	6 ft. (tree well)
Street Lighting	Key: all thoroughfares in all context zones; intersection safety lighting, basic street lighting, and pedestrian-scaled lighting is recommended. See Chapter 8 Streetside Design Guidelines and Chapter 10 Intersection Design Guidelines.								
Traveled Way									
Target Speed (mph)	25–35	25–30 [4]	25	25–35	25–30	25	25–35	25–30 [4]	25
Number of Through Lanes (h)	4–6	2–4	2–4	4–6	2–4	2–4	4–6	2–4	2–4
Lane Width [4]	10–12 ft.	10–11 ft.	10–11 ft.	10–11 ft.	10–11 ft.	10–11 ft.	10–11 ft.	10–11 ft.	10–11 ft.
Parallel On-Street Parking Width [7]	8'	7–8 ft.	7–8 ft.	7 ft.	7 ft.	7 ft.	8 ft.	8 ft.	7–8 ft.
Min. Combined Nonmotorized Lane Width	10 ft.	10 ft.	10 ft.	10 ft.	10 ft.	10 ft.	10 ft.	10 ft.	10 ft.
Horizontal Radius (per AASHTO) [8]	200–300 ft.	200–300 ft.	200 ft.	200–300 ft.	200–300 ft.	200 ft.	200–300 ft.	200–300 ft.	200 ft.
Vertical Alignment	See AASHTO minimums as a target, but consider combinations of horizontal and vertical per AASHTO Green Book.								
Medians [9]	4–10 ft.	Optional 4–10 ft.	None	4–10 ft.	Optional 4–16 ft.	None	4–10 ft.	Optional 4–16 ft.	None
Bike Lanes (min. preferred width)	5 ft. / 6 ft.	5 ft. / 6 ft.	5 ft. / 6 ft.	5 ft. / 6 ft.	5 ft. / 6 ft.	5 ft. / 6 ft.	5 ft. / 6 ft.	5 ft. / 6 ft.	5 ft. / 6 ft.
Access Management [10]	High	Low–Moderate	Low–Moderate	Moderate	Low–Moderate	Low–Moderate	High	Low–Moderate	Low–Moderate
Typical Traffic Volume Range (ADT) [11]	15,000–60,000	1,500–30,000	1,000–15,000	15,000–30,000	1,500–30,000	500–6,000	15,000–40,000	1,500–30,000	1,000–15,000
Intersections									
Roundabout [12]	Consider urban single-lane roundabouts at intersections on avenues with less than 25,000 entering vehicles per day, and urban double-lane roundabouts at intersections on boulevards and avenues with less than 40,000 entering vehicles per day.								
Curb Return Radii/Curb Extensions and Other Design Elements	Refer to Chapter 10 Intersection Design Guidelines.								

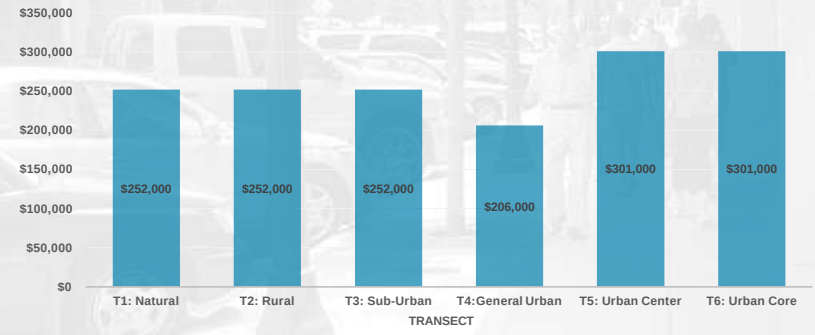
- Source: ITE/CNU Designing Walkable Urban Thoroughfares

Table 5. Regional Arterial Design Matrix (MoDOT & PennDOT, 2008)

Regional Arterial		Rural	Suburban Neighborhood	Suburban Corridor	Suburban Center	Town/Village Neighborhood	Town/Village Center	Urban Core
Roadway	Lane Width	11' to 12'	11' to 12' (14' to 15' outside lane if no shoulder or bike lane)	11' to 12' (14' to 15' outside lane if no shoulder or bike lane)	11' to 12' (14' outside lane if no shoulder or bike lane)	10' to 12' (14' outside lane if not shoulder or bike lane)	10' to 12' (14' outside lane if not shoulder or bike lane)	10' to 12' (14' outside lane if not shoulder or bike lane)
	Paved Shoulder Width	8' to 10'	8' to 10'	8' to 12'	4' to 6' (if no parking or bike lane)	4' to 6' (if no parking or bike lane)	4' to 6' (if no parking or bike lane)	4' to 6' (if no parking or bike lane)
	Parking Lane	NA	NA	NA	8' parallel	8' parallel; see 7.2 for angled	8' parallel; see 7.2 for angled	8' parallel
	Bike Lane	NA	5' to 6' (if no shoulder)	6' (if no shoulder)	5' to 6'	5' to 6'	5' to 6'	5' to 6'
	Curb Return	30' to 50'	25' to 35'	30' to 50'	25' to 50'	15' to 40'	15' to 40'	15' to 40'
	Number of Travel Lanes	2 to 6	2 to 6	4 to 6	4 to 6	2 to 4	2 to 4	2 to 6
Roadside	Clear Sidewalk Width	NA	5'	5' to 6'	5' to 6'	6' to 8'	6' to 10'	6' to 12'
	Buffer	NA	6+	6' to 10'	4' to 6'	4' to 6'	4' to 6'	4' to 6'
	Shy Distance	NA	NA	NA	0' to 2'	0' to 2'	2'	2'
	Total Sidewalk Width	NA	5'	5' to 6'	9' to 14'	10' to 16'	12' to 18'	12' to 20'
Speed	Desired Operating Speed (mph)	45–55	35–40	35–55	30–35	30–35	30–35	30–35

From: FHWA Road Diet Guide

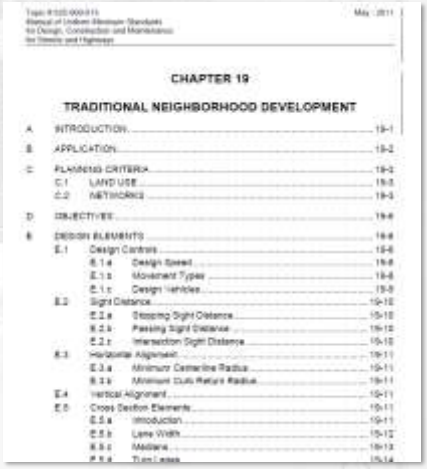
Figure 3-1: Average Trail Cost Per Mile By Transect



- Source: DRAFT FDOT Multiuse Trails Cost and Funding

Florida Greenbook

Hollywood Blvd,
Hollywood FL



CHAPTER 19

TRADITIONAL NEIGHBORHOOD DEVELOPMENT

Tips and Tricks

- **A good scope makes life much easier**
  - » Think vertically at initial scoping
  - » Engage all stake holders at the very beginning
  - » Break down the “silos of excellence”
- **Look at what’s already in place**
  - » We actually have ample design guidance out there
  - » What’s lacking is political will and intent
  - » Good scoping helps
- **The Vision Thing**
  - » The Vision sets the direction
  - » Have a good plan in place

Questions?

http://www.dot.state.fl.us/rddesign/CSI/Default.shtm

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